# DEPARTMENTAL ENERGY MANAGEMENT PROGRAM (DEMP) MODEL PROGRAMS

April 17, 2001

#### DEMP MODEL PROGRAMS

 FEMP MEMORANDUM, DEC 13, 2000, REQUESTING NOMINATIONS FOR UP TO \$1.5 MILLION FUNDING

 SECOND INITIATIVE – FIRST WAS DIRECT FUNDING OF RETROFIT PROJECTS

#### DEMP MODEL PROGRAMS

- 15 AREAS OF CONSIDERATION
  - EXPAND ESPC/UESC
  - AUDITS FOR ENERGY EFFICIENCY, WATER CONSERVATION, SURPLUS FACILITES, INDUSTRIAL, LABORATORY
  - ENERGY STAR BUILDINGS/PRODUCTS
  - HIGH EFFICIENCY SYSTEMS/OFF-GRID GENERATION
  - SUSTAINABLE DESIGN/LEED CERTIFICATION
  - CHILLER REPLACEMENTS CLASS 1 ODS
  - BLDG COMMISSIONING/RECOMMISSIONING

#### DEMP MODEL PROGRAMS

- EVALUATION CRITERIA
  - DOE LEADERSHIP EO13123 IMPLEMENTATION
  - POTENTIAL FOR COST-EFFECTIVE PROJECTS
     & OTHER BENEFITS
  - TRANSFERABILITY
  - SITE COST SHARING COMMITMENT
  - EXPERIENCE OF PROJECT TEAM & PARTNERS
  - MANAGEMENT COMMITMENT

## DEMP MODEL PROGRAMS SUSTAINABLE DESIGN

- SUSTAINABLE BUILDINGS DESIGN HELP W/EMPHASIS ON LEED CERTIFICATION
- PROPOSALS FUNDED AT PNNL, ORNL, & SNLNM
  - SOME COST SHARING
  - RESEARCH EXISTING STANDARDS & DETERMINE SITE APPLICABILITY
  - REVISE DESIGN STANDARDS/CRITERIA
  - APPLY TO NEW BUILDINGS DESIGN
  - LESSONS LEARNED TO OTHER DOE SITES
- NREL ACCREDIT LEED EVALUATORS, CERTIFY ONE BUILDING, ENERGY STAR PROCUEMENT, EXPAND WEB SITE

### DEMP MODEL PROGRAMS RECOMMISSIONING

- PNNL & ANL-E PROPOSALS FUNDED
- MONITORING BUILDING ENERGY USERS
- IMPLEMENT LOW COST ENERGY & MAINTENANCE CORRECTIONS
- IMPLEMENT HIGHER COST ITEMS (OTHER FUNDING SOURCES)
- LESSONS LEARNED

### DEMP MODEL PROGRAMS WATER MANAGEMENT

- TARGET WATER CONSERVATION OR INCREASED EFFICIENCY OF USE
  - SITE-WIDE WATER MANAGEMENT PLAN & AUDITS OF AT LEAST 20% OF HIGHEST WATER USAGE FACILITIES AT INEEL
  - SITE-WIDE EVALUATION OF LOW
    CONDUCTIVITY WATER SYSTEM AT FERMI

#### DEMP MODEL PROGRAMS ENERGY STAR BUILDINGS

- TARGET QUALIFY BUILDINGS FOR ENERGY STAR LABEL THROUGH BENCHMARKING, AUDITING TO IDENTIFY COST EFFECTIVE MEASURES, & COLLECTING 1 YEAR OF METERED ENERGY USE DATA
  - METERING 11 BUILDINGS AT ONRL
  - SITE-WIDE METERING PLAN &
     METERING 2 BUILDINGS AT INEEL

### DEMP MODEL PROGRAMS EXPANDING ESPC/UESC

- FUNDED NEW STARTS FOR ESPC DELIVERY ORDERS AT SRS & INEEL & FOR UESC AT FERMI
- FUNDED PILOT TESTS FOR USE OF ESPC IN CONTAMINATED SURPLUS FACILITIES AT INEEL & RL